Reply to Office Action of September 21, 2009

AMENDMENT TO CLAIMS

1. (Currently Amended) A process for preparing poly(arylenevinylenes), which have a solubility of least 0.5 % by weight in at least one organic solvent, from bis(halomethyl)arylenes which comprises base-induced dehydrohalogenation, wherein the reaction is carried out in the presence of between 2 and 40 mol% of one or more compounds of the formula (I):

Formula (I)

where the symbols are defined as follows:

Aryl is the same or different at each instance and is a bivalent aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and is optionally substituted by R¹ radicals or else be unsubstituted, or an R¹-substituted or unsubstituted stilbenylene unit; the two substituents CHXR and CHYR are arranged in such a way that there is an even number of aromatic atoms between them; the aryl and heteroaryl systems may also be part of a larger fused aromatic ring system; the possible substituents R¹ may potentially be situated at any free position;

R is the same or different at each instance and is an alkyl chain which has from 4 to 40 carbon atoms, and may also be substituted by one or more R¹ radicals or be unsubstituted, in which one or more nonadjacent carbon atoms may also be replaced by -CR²=CR²-, -C=C-, -NR²-, -O-, -S-, -CO-, -CO-O-, -CONR²-, -O-CO-O-, and one or more hydrogen atoms may also be replaced by fluorine, an aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and may be substituted by R¹ or be unsubstituted, an R¹-substituted or unsubstituted

stilbenyl or tolanyl unit, $-Si(R^2)_3$, $-N(R^2)_2$, $-OR^2$ or a combination of these systems; the aryl and heteroaryl systems may also be part of a larger fused aromatic ring system; the possible substituents may potentially be situated at any free position;

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- X is the same or different at each instance and is Cl, Br, I, trifluoromethanesulfonate or arylsulfonate;
- Y is the same or different at each instance and is Cl, Br, I, trifluoromethanesulfonate, arylsulfonate or R¹;
- Is the same or different at each instance and is a straight-chain, branched or cyclic alkyl chain having from 1 to 40 carbon atoms, in which one or more nonadjacent carbon atoms may also be replaced by $-CR^2 = CR^2$, -C = C, $-RR^2$, -C, and one or more hydrogen atoms may be replaced by fluorine, an aromatic or heteroaromatic ring system which has from 2 to 40 carbon atoms and may also be substituted by one or more nonaromatic R^1 radicals, a substituted or unsubstituted vinyl group or -C, -C,
- R² is the same or different at each instance and is H, a straight-chain, branched or cyclic alkyl chain having 1 to 22 carbon atoms, in which one or more nonadjacent carbon atoms may also be replaced by –O-, -S-, -CO-O-, -O-CO-O-, and one or more hydrogen atoms may also be replaced by fluorine, an aryl or heteroaryl system which has from 2 to 40 carbon atoms and may also be substituted by one or more nonaromatic R¹.
- 2. (Previously presented) The process as claimed in claim 1, wherein the halogen atoms in the bis(halomethyl)arylene monomers are the same or different and are each Cl, Br or I.

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3. (Previously presented) The process as claimed in claim 1, wherein the polymerization is carried out in an ether, an aromatic hydrocarbon, a chlorinated aromatic compound or a

mixture of these solvents.

4. (Previously presented) The process as claimed in claim 1, wherein the reaction is carried

out in a concentration range from 0.005 to 5 mol/L (monomer/solution volume).

5. (Previously presented) The process as claimed in claim 1, wherein the bases used are

alkali metal hydroxides, alkali metal alkoxides or organic amines or amides, or else alkali

metal hydrides or metal organyls, provided that the solvents used are not DMSO,

alcohols or chlorinated solvents.

6. (Previously presented) The process as claimed in claim 1, wherein the amount of the

base used is in the range from 2 to 10 equivalents (based on one equivalent of monomer).

7. (Cancelled)

(Currently Amended) The process as claimed in claim 1, wherein for the compound of 8.

the formula (I):

is the same or different at each instance and is a bivalent aromatic ring

system which has from 2 to 40 carbon atoms and optionally is substituted by up to

4 substituents R¹ or else be unsubstituted, or an R¹-substituted or unsubstituted

stilbenylene unit; the two substituents CHXR and CHYR are arranged in such a

way that there is an even number of aromatic atoms between them; the aryl

system optionally is part of a larger fused aromatic ring system; the possible

substituents R¹ may potentially be situated at any free position;

R is as defined in claim 1;

X is the same or different at each instance and is Cl, Br, I;

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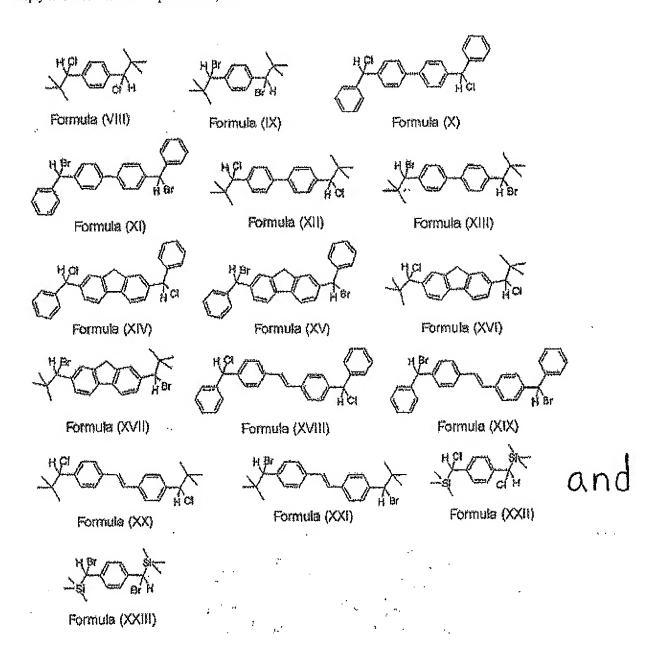
Y is as defined in claim 1;

R¹ and R² are each as defined in claim 1.

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9. (Previously presented) The process as claimed in claim 8, wherein the compound of the formula (I) is selected from the formulae (II) to (XXV) which may be substituted or unsubstituted:

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10-18 (Cancelled)